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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/379,945	08/24/1999	JEFFREY S. ANDERSON	1006-018/MMM	1979

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IPSOLON LLP
111 SW COLUMBIA
SUITE 710
PORTLAND, OR 97201

EXAMINER

MICHALSKI, JUSTIN I

ART UNIT PAPER NUMBER

2615

DATE MAILED: 06/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/379,945	ANDERSON, JEFFREY S.	
	Examiner	Art Unit	
	Justin Michalski	2615	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 March 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1, 11, 20, and 29 have been considered but are moot in view of the new ground(s) of rejection.

Claim Objections

2. Claim 30 is objected to because of the following informalities: Claim 30 is dependent on absent claims 31. The office has examined claim 30 as dependent on claim 29 since claim 29 is the only claim corresponding to a method as recited in claim 30. Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 3, 10, 20, 21, 28, and 29 are rejected under 35 U.S.C. 102(b) as being anticipated by House (US Patent 5,809,338).

Regarding Claims 1 and 20, House discloses a dynamic bass equalization circuit with a second or higher order active filter (Fig. 2, input network to terminal 6) having a dynamically adjusted gain and frequency response that vary with the amplitude of the audio electrical signal (Fig. 3).

Regarding Claim 29, House discloses dynamically adjusting the gain of the bass equalization circuit according to the amplitude of the audio electrical signal to provide an amplitude dependent gain (response of Fig. 3); and dynamically adjusting the frequency response of the bass equalization circuit according to the amplitude dependent gain (Fig. 3).

Regarding Claims 3 and 21, House further discloses parallel pair of reversed diodes (96-99).

Regarding Claims 10 and 28, House further discloses a full range speaker (38).

5. Claims 1, 2, 8, 10, 11, 17, 19, 20, 26, 28, and 29 are rejected under 35 U.S.C. 102(b) as being anticipated by Konno (US Patent 5,35,388).

Regarding Claims 1 and 20, Konno discloses a dynamic bass equalization circuit with a second or higher order active filter having a dynamically adjusted gain and frequency response that vary with the amplitude of the audio electrical signal (Col. 2, lines 1-42).

Regarding Claim 2, Konno discloses a Sallen-Key high pass filter (Fig. 1).

Regarding Claim 11, Konno discloses a dynamic bass equalization circuit with a second or higher order Sallen-Key filter having a dynamically adjusted gain and frequency response that vary with the amplitude of the audio electrical signal (Fig. 1, Col. 2, lines 1-42).

Regarding Claims 8, 17, and 26, Konno further discloses a positive feedback path having a voltage divider that voltage divides a feedback voltage (Fig. 1).

Regarding Claims 10, 19, and 28, Konno further discloses a bass equalized audio signal that is delivered to a full-range speaker driver (It is inherent that the audio signal will be delivered to a full-range speaker driver in order to drive a speaker for an audio output).

Regarding Claim 29, Konno discloses dynamically adjusting the gain of the bass equalization circuit according to the amplitude of the audio electrical signal to provide an amplitude dependent gain; and dynamically adjusting the frequency response of the bass equalization circuit according the amplitude dependent gain (Col. 2, lines 1-43).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 4-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Konno as applied to claim 1 above, and further in view of Fosgate (US Patent 5,263,087).

Regarding Claim 4, Konno discloses a system as stated apropos of claim 1 but does not disclose an amplifier with a negative feedback path that includes a pair of opposed diodes. Fosgate discloses a negative feedback path with a parallel pair of opposed diodes (D401 and D402) in order to perform a logging function and yield improved accuracy (Col. 8, lines 27-38). Therefore it would have been obvious to one

of ordinary skill in the art at the time the invention was made to include a negative feedback path of opposed diodes for a logging function and improved accuracy.

Regarding Claim 5, Fosgate further discloses resistor R401 in series with the parallel pair of opposed diodes.

Regarding Claim 6, Konno further discloses a positive feedback path having a voltage divider that voltage divides a feedback voltage (Fig. 1).

Regarding Claim 7, Fosgate further discloses resistor R401 in series with the parallel pair of opposed diodes.

8. Claims 12-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Konno as applied to claim 11 above, and further in view of Fosgate (US Patent 5,263,087).

Regarding Claim 12, Konno discloses a system as stated apropos of claim 11 but does not disclose an amplifier with a negative feedback path that includes a pair of opposed diodes. Fosgate discloses a negative feedback path with a parallel pair of reversed diodes (D401 and D402) in order to perform a logging function and yield improved accuracy (Col. 8, lines 27-38). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to include a negative feedback path of reversed diodes for a logging function and improved accuracy.

Regarding Claim 13, Konno discloses a system as stated apropos of claim 11 but does not disclose an amplifier with a negative feedback path that includes a pair of opposed diodes. Fosgate discloses a negative feedback path with a parallel pair of

opposed diodes (D401 and D402) in order to perform a logging function and yield improved accuracy (Col. 8, lines 27-38). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to include a negative feedback path of opposed diodes for a logging function and improved accuracy.

Regarding Claim 14, Fosgate further discloses resistor R401 in series with the parallel pair of opposed diodes.

Regarding Claim 15, Konno further discloses a positive feedback path having a voltage divider that voltage divides a feedback voltage (Fig. 1).

Regarding Claim 16, Fosgate further discloses resistor R401 in series with the parallel pair of opposed diodes.

9. Claims 22-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Konno as applied to claim 20 above, and further in view of Fosgate (US Patent 5,263,087).

Regarding Claim 22, Konno discloses a system as stated apropos of claim 20 but does not disclose an amplifier with a negative feedback path that includes a pair of opposed diodes. Fosgate discloses a negative feedback path with a parallel pair of opposed diodes (D401 and D402) in order to perform a logging function and yield improved accuracy (Col. 8, lines 27-38). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to include a negative feedback path of opposed diodes for a logging function and improved accuracy.

Regarding Claim 23, Fosgate further discloses resistor R401 in series with the parallel pair of opposed diodes.

Regarding Claim 24, Konno further discloses a positive feedback path having a voltage divider that voltage divides a feedback voltage (Fig. 1).

Regarding Claim 25, Fosgate further discloses resistor R401 in series with the parallel pair of opposed diodes.

10. Claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over Konno as applied to claim 29 above, and further in view of Fosgate (US Patent 5,263,087).

Regarding Claim 30, Konno discloses a system as stated apropos of claim 29 but does not disclose an amplifier with a negative feedback path that includes a pair of opposed diodes. Fosgate discloses a negative feedback path with a parallel pair of opposed diodes (D401 and D402) in order to perform a logging function and yield improved accuracy (Col. 8, lines 27-38). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to include a negative feedback path of opposed diodes for a logging function and improved accuracy.

Conclusion


11. The Art Unit location of your application in the USPTO has changed. To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to Art Unit 2615.


Art Unit: 2615

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Justin Michalski whose telephone number is (571)272-7524. The examiner can normally be reached on M-F 7-3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian Chin can be reached on (571)272-7848. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JIM

June 5, 2006


VIVIAN CHIN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600